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RESEARCH ARTICLE

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Notulae to the Italian flora of algae, bryophytes, fungi and lichens: 18

Sonia Ravera[1,2], Alfredo Vizzini[3], Marta Puglisi[4], Cecilia Totti[5], Mattia Martin Azzella[6], Andrea Battaglini[7], Philippe Blaise[8], Fabrizio Boccardo[9], Ilaria Bonini[10], Laura Cancellieri[11], Philippe Clerc[12], Antonio B. De Giuseppe[13], Francesco Dovana[14], Zuzana Fačkovcová[15,16], Goffredo Filibeck[11], Fabio Filippelli[11], Gabriele Gheza[17], Josef Hafellner[18], Deborah Isocrono[19], Valentina Lucia Astrid Laface[20], Jiří Malíček[21], Giuliana Mazzacuva[20], Juri Nascimbene[17], Pier Luigi Nimis[22], Silvia Ongaro[19], Giulio Pandeli[10], Luca Paoli[23], Nicodemo G. Passalacqua[13,24], Domenico Puntillo[13], Michele Puntillo[13], Leonardo Rosati[25], Giovanni Sicoli[24], Luigi Torino[26], Mauro Tretiach[22]

1 *Dipartimento di Scienze e Tecnologie Biologiche Chimiche e Farmaceutiche (STEBICEF), Università di Palermo, Via Archirafi 38, 90123 Palermo, Italy* **2** *NBFC, National Biodiversity Future Center, Palermo 90133, Italy* **3** *Institute for Sustainable Plant Protection (IPSP) - CNR, Viale P.A. Mattioli 25, 10125 Torino, Italy* **4** *Dipartimento di Scienze Biologiche, Geologiche e Ambientali, Sezione di Biologia vegetale, Università di Catania, Via A. Longo 19, 95125 Catania, Italy* **5** *Dipartimento di Scienze della Vita e dell'Ambiente, Università Politecnica delle Marche, via Brecce Bianche, 60131 Ancona, Italy* **6** *Dipartimento di Pianificazione, Design, Tecnologia Dell'architettura, Sapienza Università di Roma, Via Flaminia 72, 00196 Roma, Italy* **7** *Via del Bandino 40, 50126 Firenze, Italy* **8** *D-Hest, ETH Zürich, CH-8092 Zurigo, Switzerland* **9** *Via Filippo Bettini 14/11, 16162 Genova, Italy* **10** *Dipartimento di Scienze della Vita, Università di Siena, Via P. A. Mattioli 4, 53100 Siena, Italy* **11** *Dipartimento di Scienze Agrarie e Forestali, Università della Tuscia, Via S. C. de' Lellis snc, 01100 Viterbo, Italy* **12** *Conservatoire et Jardin botaniques (CJB), CH-1292 Chambésy-Genève, Switzerlan* **13** *Museo di Storia Naturale della Calabria ed Orto Botanico, Università della Calabria, 87036 Arcavacata di Rende (Cosenza), Italy* **14** *Dipartimento di Bioscienze, Biotecnologie e Ambiente (DBBA), Campus Universitario "Ernesto Quagliariello", Università degli Studi di Bari "Aldo Moro", Via Orabona 4, 70125 Bari, Italy* **15** *Plant Science and Biodiversity Centre, Slovak Academy of Sciences, Dúbravská cesta 9, SK-84523 Bratislava, Slovakia* **16** *Dipartimento di Farmacia (DIFAR), Università di Genova, viale Cembrano 4, 16148, Genova, Italy* **17** *BIOME Lab, Dipartimento di Scienze Biologiche, Geologiche e Ambientali, Alma Mater Studiorum, Università di Bologna, Via Irnerio 42, 40126 Bologna, Italy* **18** *Institute of Biology, Division of Plant Sciences, University of Graz, NAWI Graz, Holteigasse 6, 8010 Graz, Austria* **19** *Dipartimento di Scienze Agrarie, Forestali e Alimentari, Università di Torino, Largo Paolo Braccini 2, 10095 Grugliasco (Torino), Italy* **20** *"AGRARIA" Department, Mediterranean University of Reggio Calabria, Località Feo di Vito snc, 89122, Reggio Calabria, Italy* **21** *Institute of Botany, The Czech Academy of Sciences, Zámek 1, CZ-252 43 Průhonice, Czech Republic* **22** *Dipartimento di Scienze della Vita, Università di Trieste, Via L. Giorgieri 10, 34127 Trieste, Italy* **23** *Dipartimento di Biologia, Università di Pisa, Via Luca Ghini 13, 56126 Pisa, Italy* **24** *Dipartimento di Biologia, Ecologia e Scienze della Terra, Università della Calabria, 87036, Arcavacata di Rende (Cosenza), Italy*

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25 *Scuola di Scienze Agrarie, Forestali, Alimentari e Ambientali, Università della Basilicata, Via dell'Ateneo Lucano 10, 85100 Potenza), Italy* **26** *Via Sbarre Centrali 366, 89132 Reggio Calabria, Italy*

Corresponding author: Sonia Ravera (sonia.ravera@unipa.it)

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Abstract

In this contribution, new data concerning algae, bryophytes, fungi and lichens of the Italian flora are presented. It includes new records, confirmations or exclusions for the algal genera *Chara* and *Tolypella*, the bryophyte genera *Pogonatum*, *Pseudephemerum*, and *Riella*, the fungal genera *Arrhenia*, *Arthonia*, *Buchwaldoboletus*, *Dacampia*, *Hebeloma*, *Inocybe*, and *Trechispora*, and the lichen genera *Aspicilia*, *Bellemerea*, *Cladonia*, *Hypotrachyna*, *Maronea*, *Parvoplaca*, *Polyozosia*, *Schismatomma*, *Solenopsora*, *Trapelia*, and *Zwackhia*.

Keywords

Ascomycota, Basidiomycota, Bryidae, Charophyceae

How to contribute

The text of the records should be submitted electronically to: Cecilia Totti (c.totti@univpm.it) for algae, Marta Puglisi (mpuglisi@unict.it) for bryophytes, Alfredo Vizzini (alfredo.vizzini@unito.it) for fungi, Sonia Ravera (sonia.ravera@unipa.it) for lichens. Each text should be within 1,000 characters (spaces included).

Floristic records

ALGAE

***Chara braunii* C.C.Gmel. (Characeae)**

+ **LAZ**: Riserva Naturale di Decima Malafede, Roma (UTM WGS 84: 33T 287779.4622766), permament pond, bottom between 0.2 and 1 m depth., 83 m, June 2014, *M.M. Azzella*; Piscina della Cava di Brecciolino, Tenuta presidenziale di Castelporziano, Roma (Roma) (UTM WGS 84: 33T 284805.4627879), permanent pond, bot-

tom between 0.2 and 1 m depth, on muddy substrate, 20 m, 5 June 2024, *M.M. Azzella* (HFLA). – Species new for the flora of Lazio.

This species can be distinguished easily from other *Chara* species by the absence of a cortex and is characterized by a wide intraspecific variability (Kato et al. 2008). In Italy, it has been considered a rare species (Romanov et al. 2019), and recorded for Piemonte, Lombardia, Veneto, Emilia-Romagna, Toscana, Campania, and Sicilia (Bazzichelli and Abdelahad 2009).

M.M. Azzella, G. Filibeck, L. Rosati

***Tolypella intricata* (Trentepohl ex Roth) Leonhardi (Characeae)**

+ **BAS**: Monte Santa Croce, San Fele (Potenza) (WGS 84: 33T 548210.4515459), small pond with a maximum depth of 0.7 m, 1060 m, 25 March 2024, leg. *L. Rosati, V.A. Romano, A. Stinca*, det. *M.M. Azzella, L. Rosati* (HLUC). – Species new for the flora of Basilicata.

This species was not hitherto recorded for southern Italy. The known stations of *T. intricata* in Italy are in Lombardia, Veneto, and Emilia-Romagna (Bazzichelli and Abdelahad 2009). The dense aquatic vegetation completely covering the bottom of the pond is dominated by *T. intricata* with the presence of *Groenlandia densa* (L.) Fourr. and *Ranunculus trichophyllus* Chaix. This species has a cosmopolitan distribution, with localities reported all over Europe (e.g., Becker et al. 2015), North America (Prescott 1962), and Oceania (Day et al. 1995).

L. Rosati, M.M. Azzella

BRYOPHYTES

***Pogonatum nanum* (Hedw.) P.Beauv. (Polytrichaceae)**

+ **ABR**: Valico Aceretta (between Monte Ceraso and Monte delle Vitelle), south-east slope, Pescasseroli (L'Aquila) (UTM WGS84: 33T 395030.4629019), 1690 m, 4 July 2024, shoulder of a forest track in a beech forest, *F. Filippelli, L. Cancellieri* (UTV: B_000007); Rifugio Campitelli, Alfedena (L'Aquila) (UTM WGS84: 33T 414975.4616748), 1430 m, 28 July 2024, shoulder of a forest track in a beech forest, *F. Filippelli, L. Cancellieri* (UTV: B_000008). – Species new for the flora of Abruzzo.

Pogonatum nanum is a European temperate species that grows on acidic soil on banks, heaths and roadsides (Smith 2004). It is quite common in Italy, where it has been reported for many Italian administrative regions (Aleffi et al. 2023). In the new sites it was found on the ground, among the surface roots of beech trees in beech forests characterized by high levels of atmospheric humidity.

F. Filippelli, L. Cancellieri

***Pseudephemerum nitidum* (Hedw.) Loeske (Ditrichaceae)**

+ **TOS**: Riserva Naturale Provinciale "Monte Serra di Sotto", Buti (Pisa) (UTM WGS84: 32T 625953.4844348), along stream edges, on acidic soil, 610 m, 29 May 2019, *G. Pandeli* (SIENA; Herb. Pandeli). – Species confirmed for the flora of Toscana.

A small gregarious species currently recorded in Lombardia, Umbria, and Abruzzo and, with old reports, from Emilia-Romagna and Toscana (Aleffi et al. 2023). In the new site, this species was found on quartz-rich sediments along stream edges with *Calypogeia arguta* Nees & Mont., *Cephaloziella turneri* (Hook.) Müll.Frib., *Entosthodon obtusus* (Hedw.) Lindb., *Pogonatum aloides* (Hedw.) P.Beauv., and *Polytrichum juniperinum* Hedw. The current record is a confirmation of the species for the flora of Toscana after more than 140 years (Lange 1868, 1875; De Notaris 1869; Fitzgerald and Bottini 1881). *Pseudephemerum nitidum* has been recently considered as Near Threatened in Italy (Puglisi et al. 2024).

G. Pandeli, I. Bonini

***Riella notarisii* (Mont.) Mont. (Riellaceae)**

+ **TOS**: Area APEA, Loc. Colmata, Piombino (Livorno) (UTM WGS84: 32T 625934.4757158), in a small temporary pond near a building site, 1 m, 14 April 2023, *G. Pandeli* (SIENA; Herb. Pandeli). – Species new for the flora of Toscana.

Riella notarisii is a terricolous, hygrophilous, halophilous species, currently recorded in the southern Italian administrative regions of Sicilia and Calabria and with old reports from Sardegna (Aleffi et al. 2023). The collected specimens were found in a small temporary pond with *Ranunculus trichophyllus* Chaix, *Chara vulgaris* L., and *Nitella tenuissima* (Desv.) Kütz, and the notheworty presence of *Petalophyllum ralfsii* (Wilson) Nees & Gottsche at the edges. This rare liverwort is considered Endangered in Italy (Puglisi et al. 2023) and Near Threatened in Europe (Hodgetts et al. 2019).

G. Pandeli, I. Bonini, A. Battaglini

FUNGI

***Arrhenia obscurata* (D.A.Reid) Redhead, Lutzoni, Moncalvo & Vilgalys (Hygrophoraceae)**

+ **CAL**: Botanical Garden, University of Calabria, Rende (Cosenza) (UTM WGS84: 33S 605863.4357365), among mosses along the stony edge of a path, 200 m, 13 March 2024, *N.G. Passalacqua, D. Puntillo, G. Sicoli* (CLU F337). – Species new to Calabria.

A completely greyish-brown and omphalinoid basidiome was found having the pileus slightly exceeding 1 cm in width, thin-fleshed, translucently striate at margin, depressed and slightly paler in the centre. The stipe was as long as pileus width, 2–3 mm width, curved and subclavate at base. Gills were rather distant, broad and decurrent. Spores were hyaline, broadly ellipsoid with a prominent lateral apiculum,

and 8–10 × 5–7 µm in size. In Italy, this species has been apparently detected only in the northern regions, so far (Onofri et al. 2013).

N.G. Passalacqua, D. Puntillo, G. Sicoli

***Arthonia molendoi* (Frauenf.) R.Sant. (Arthoniaceae)**

+ **LOM**: Eastern Alps, Central Alps, Southern Rhaetian Alps, Stelvio (Ortler) - group, Cima di Cadì N above Passo del Tonale, NW below the summit on the ridge to M. Tonale Occidentale (Brescia) (UTM WGS84: 32T 620812.5125952), outcrops of calcareous schist on the crest in alpine vegetation, on low outcrops, on thallus and apothecia of *Rusavskia elegans* (Link) S.Y.Kondr. & Kärnefelt, 2570 m, 28 July 2006, leg. *J. Hafellner, L. Muggia*, det. *J. Hafellner* (GZU - JH77163). – Species new to Lombardia.
+ **PIE**: Western Alps, Alpi Cozie, on the ridge W above Colle del Vallonetto (Cuneo) (UTM WGS84: 32T 381466.4888521), calcareous cliffs and boulders in alpine vegetation, on cliffs exposed to SE, on thallus and apothecia of *Calogaya biatorina* (A.Massal.) Arup, Frödén & Søchting, 2500 m, 23 July 2000, leg. *A. Hafellner, J. Hafellner, P.L. Nimis, M. Tretiach*, det. *J. Hafellner* (GZU - JH88157); Alpi Cozie, in the valley E below Colle Valcavera (Cuneo), (UTM WGS84: 32T 350630.4915542), large boulders of calcareous schist in subalpine pasture, on steep rock faces, on thallus and apothecia of *Calogaya biatorina* (A.Massal.) Arup, Frödén & Søchting, 2140 m, 23 July 2000, *J. Hafellner, P.L. Nimis, M. Tretiach* (GZU - JH87651). – Species new to Piemonte.

This species is restricted to *Rusavskia* (i.e. *Xanthoria elegans* group) and *Calogaya* (i.e. *Caloplaca biatorina-saxicola* group) and hence to preferably saxicolous teloschistalean lichens. *Arthonia molendoi* is known from all continents and is also widely distributed in Italy including the Alps, where is has so far been reported for the regions Friuli, Trentino-Alto Adige (including the type locality), Valle d'Aosta, and Liguria (Brackel 2016; Nimis and Martellos 2024). *Arthonia* populations growing on other Teloschistales refer to other species, e.g., *A. parietinaria*.

J. Hafellner

***Arthonia parietinaria* Hafellner & A.Fleischhacker (Arthoniaceae)**

+ **FVG**: Carnic Alps, W of Ampezzo by the road to Passo del Pura, near Albergo e Ristorante Pura (Udine) (UTM WGS84: 33T 328364.5142459), solitary *Juglans regia* L. in a meadow, on branches in the lower canopy, on thallus and apothecia of *Xanthoria parietina* (L.) Th.Fr., 715 m, 17 August 1994, *J. Hafellner* (GZU - JH87217). – Species new to Friuli Venezia Giulia.
+ **TAA**: Val Venosta (Vinschgau), Glorenza (Glurns), near the eastern gate of the old town, (Bolzano/Südtirol) (UTM WGS84: 32T 619091.5169763), fence and hedge, on bark of *Crataegus* sp., on thallus and apothecia of *Xanthoria parietina* (L.) Th.Fr., 950 m, 3 September 2002, *J. Hafellner* (GZU - JH84423). – Species new to Trentino-Alto Adige.

Arthonia parietinaria - restricted to *Xanthoria* s.str. - is a rather conspicuous species and is fairly common in Europe (Fleischhacker et al. 2016). The earlier records of an *Arthonia* on *Xanthoria parietina* (L.) Th.Fr. in Italy, published under various other names, are relatively few and have been sorted by Brackel (2020). In Italy, most of the findings so far origin from the central and southern parts of the country (Nimis and Martellos 2024) but as demonstrated here, the species can also be expected in the valleys of the Alps.

J. Hafellner

***Buchwaldoboletus sphaerocephalus* (Barla) Watling & T.H.Li (Boletaceae)**

+ **CAL**: Fossato, Montebello Jonico (Reggio Calabria) (UTM WGS84: 33S 567387.4209343), at the base of a partially burnt pine tree (*Pinus* sp.), 893 m, 8 September 2024, *G. Tomasello, G. Mazzacuva, V.L.A. Laface* (REGGIO); Monte Scafi, Condofuri (Reggio Calabria) (UTM WGS84: 33S 575791.4208532), on stumps of *Pinus* sp., 1060 m, 20 August 2024, *L. Torino* (REGGIO) – Species new to Calabria.

Buchwaldoboletus sphaerocephalus preferably appears in dry Mediterranean forest during autumn and winter on stumps of *Pinus* sp., mostly *P. pinea* L., *P. pinaster* Aiton, and *P. halepensis* Mill. (Galli, 1998; Munoz, 2005). Its color is yellow to yellow-fulvus and it rapidly turns blue when bruised. In Italy, this species is rather rare.

V.L.A. Laface, G. Mazzacuva, L. Torino

***Dacampia engeliana* (Saut.) A.Massal. (Dacampiaceae)**

+ **FVG**: Southern Alps, Carnic Alps, M. Pieltinis N of Sauris, ridge on NW side of summit (Udine) (UTM WGS84: 33T 323968.5150770), Werfen slate, in mossy crevices, 2000 m, on *Solorina* sp., 28 July 1993, *J. Hafellner* (GZU - JH32662). [label text in German]. – Species new to Friuli Venezia Giulia.
+ **VEN**: Southern Alps, Venetian Pre-Alps, SE of Belluno, M. Faverghera, S above Nevegal, uppermost northern slopes at Orto Botanico (Belluno) (UTM WGS84: 33T 291249.5106850), low limestone outcrops and boulders in subalpine meadows, on soil in crevices, N-exposed, on *Solorina* sp., 1540 m, 31 August 2002, J. Hafellner (GZU - JH84434). – Species new to Veneto.
+ **VDA**: Western Alps, M. Bianco (Mont Blanc) group, Val Veny W of Courmayeur, ridge W above Rifugio E. Soldini (Aosta), (UTM WGS84: 32T 331630.5070248), cliffs and boulders of Jurassic limestone on N-exposed slope, on soil, 2250 m, on *Solorina* sp., 30 July 2001, (GZU - JH75418). – Species new to Val d'Aosta.
+ **PIE**: Western Alps, Alpi Cozie, W ridge of Monte Nebin ca. 1 km E of Colle di Sampeyre (Cuneo) (UTM WGS84: 32T 352157 4934030), outcrops of calcareous schists, on soil, on *Solorina* sp., 2380 m, 26 July 2000, *J. Hafellner, P.L. Nimis, M. Tretiach* (GZU - JH75644); ibidem, *P.L. Nimis, M. Tretiach* (TSB32987); Alpi Cozie, on the ridge W above Colle del Vallonetto (Cuneo) (UTM WGS84: 32T 349987

4916483), cliffs and boulders in alpine vegetation, on low outcrops of N-exposed calcareous sandstone, on *Solorina* sp., 2500 m, 23 July 2000, *P.L. Nimis, M. Tretiach* (TSB34652); Western Alps, Alpi Liguri, on the pass between Cima di Pertegue (Cima di Pertegà) and Rocca del Fera, W above Úpega (Cuneo) (UTM WGS84: 32T 395587 4889053), outcrops of calcareous schists in alpine vegetation, on soil somewhat N below the ridge, on *Solorina* sp., 2200 m, 20 July 2000, *J. Hafellner, P.L. Nimis, M. Tretiach* (GZU - JH87641). – Species confirmed for Piemonte.

This rather conspicuous fungus – the black ostioles in bleaching areas of the mostly sterile host thallus are visible with the naked eye – is widely distributed in the Holarctic region, with most records from the Alps (Brackel 2014). In Italy the species is so far only known from a few regions in the north (Nimis 2024). Records for Piemonte date back to the late 19th century (Brackel 2016).

J. Hafellner, P. L. Nimis, M. Tretiach

***Hebeloma populinum* Romagn. (Hymenogastraceae)**

+ **CAL**: Botanical Garden, University of Calabria, Rende (Cosenza) (UTM WGS84: 33S 605816. 4357354), at the edge of a riparian wood among the litter of natural *Populus canescens* trees (prevailing species), 205 m, 2 December 2022, *G. Sicoli, A.B. De Giuseppe, N.G. Passalacqua* (CLU F335). – Species new to Calabria.

Sparse basidiomata immediately attributable to the genus *Hebeloma* (Fr.) P.Kumm. were found in late autumn 2022 on the wet ground among litter and herbaceous plants under the crown of a poplar tree along a narrow stream. The pilei were 2.5–3.0 cm wide, smooth and clearly viscid, pale whitish-argillaceous, with a slightly inrolled margin. The gills were pale and rather dense, initially weeping then brown-spotted. The stipe was whitish to ochraceous, finely floccose. Spores were amygdaloid to citriform, verrucose to echinulate, 11.3–14.7 × 6.7–8.0 µm in size. Cheilocystidia were filiform to clavate, sometimes capitulate. The fungus had a sweetish smell and a bitter taste. So far, *H. populinum* has been reported in a few administrative regions from northern and central Italy, but not in Calabria (Onofri et al. 2013).

G. Sicoli, A.B. De Giuseppe, N.G. Passalacqua

***Inocybe albomarginata* Velen. (Inocybaceae)**

+ **LIG**: Madonna dei Partigiani, Sassello (Savona) (UTM WGS84: 32T 458180.4927530), on calcareous soil under white hornbeam (*Carpinus betulus* L.) and poplars (*Populus tremula* L.), 470 m, 8 May 2023, *F. Boccardo* (GDOR 5417). – Species new to Liguria.

Morphologically, our Ligurian collection fits well with the description of the *I. albovelutipes* Stangl epitype reported by Bandini et al. (2023). The newly obtained nrITS sequence of the GDOR5417 voucher (GB: PQ305678) shares 689/690 (99.86%) nucleotides compared with the epitype of *I. albomarginata* sequence (GB: OR102476) confirming the morphological identification. According to Onofri et al. (2013), *I. al-*

bomarginata has been reported in Italy from Lombardia and Trentino-Alto Adige, and our collection represents the first reports of this species in Liguria.

F. Boccardo, F. Dovana

Trechispora fastidiosa (Pers.) Liberta (Hydnodontaceae)

+ **CAL**: Bosco di Mavigliano, Montalto Uffugo (Cosenza) (UTM WGS84: 33S 604520.4360244), on soil 210 m, 28 November 2021, *D. Puntillo* (CLU No. 433, 434, 435). – Species new to Calabria.

The habitus of this species is similar to the juvenile stage of *Thelephora penicellata* (Pers.) Fr. and *Sebacina incrustans* (Pers.) Tul. & C.Tul. from which it differs mainly in microscopic characters and in the lack of the intense and annoying smell in the latter two species.

D. Puntillo, M. Puntillo

LICHENS

Aspicilia grisea Arnold (Megasporaceae)

+ **VDA**: Western Alps, Alpi Graie, M. Bianco (Mont Blanc) group, Val Veny W of Courmayeur, moraines E of Lago di Combal (Aosta) (UTM WGS84: 32T 334363.5071410), on inclined rock faces of gneissic boulders amongst scattered *Larix* trees, 1980 m, 30 July 2001, *J. Hafellner , P. L. Nimis, M. Tretiach* (GZU - JH 87051). – Species new to Val d'Aosta.

+ **PIE**: Western Alps, Alpi Marittime, Rocca dell'Abisso W of Colle di Tenda, E below summit, steep slopes towards uppermost Vallone dell'Abisso (Cuneo) (UTM WGS84: 32T 380673.4888905), cliffs, outcrops and dispersed boulders of gneiss exposed to the E, on inclined faces, 2630 m, 22 July 2000, leg. *A. Hafellner*, *J. Hafellner*, *M. Tretiach*, det. *J. Hafellner* (GZU - JH8736). – Species new to Piemonte.

This sorediate species, not rarely also fertile and then easier to recognize, mostly grows on horizontal to inclined faces of siliceous rock near the ground. It is widely distributed in the Alps (Nimis et al. 2018) but apparently under-collected in wide areas. In Italy it is poorly recorded, being only known from Friuli-Venezia Giulia (Tretiach and Hafellner 2000) and Lombardia (Nascimbene et al. 2021).

J. Hafellner, P. L. Nimis, M. Tretiach

Bellemerea alpina (Sommerf.) Clauzade & Cl.Roux (Lecideaceae)

+ **VEN**: Viel del Pan, Pordoi (Belluno), on siliceous volcanic rock (UTM WGS84: 32T 716833.5150861), 2492 m, 8 August 2024, *J. Nascimbene* (BOLO). – Species new to Veneto.

Bellemerea alpina is an arctic-alpine, silicicolous, crustose lichen that is quite widespread in the Italian Alps (Nimis et al. 2018; Nimis and Martellos 2024) up to the northern Apennines (Ravera et al. 2024b). The only record reported from Veneto by

Nimis (1993) is likely due to a misinterpretation by Jatta (1909–1911), since no citations of the species are reported by Massalongo (1852; Nimis, in litt.).

J. Nascimbene, G. Gheza

Cladonia ciliata Stirt. (Cladoniaceae)

- **LAZ.** – Species to be excluded from the flora of Lazio.

Cladonia ciliata is an oceanic species (Litterski and Ahti 2004) commonly found on soil with moss in undisturbed maquis vegetation, particularly in humid coastal regions. In Italy, its presence is limited to a few locations, mainly along the Tyrrhenian coast (Nimis 2024). Although it is listed as Endangered (EN) on the national Red List (Nascimbene et al. 2013), recent observations indicate a positive trend for this species in Toscana (Ravera et al. 2024a). The only record of this species in Lazio is the herbarium specimen TSB 17703, collected at the Etruscan necropolis of Blera (Viterbo) (Nimis and Martellos 2024). Recent surveys (August 2024) at the same collecting site have confirmed the disappearance of the species, likely due to neglect and abandonment of the archaeological area, as well as the gradual encroachment of the Mediterranean macchia at the expense of lichen populations.

S. Ravera

Hypotrachyna sinuosa (Sm.) Hale (Parmeliaceae)

+ **PIE**: Val Vigezzo, Craveggia (Verbano-Cusio-Ossola) (UTM WGS84: 32T 464206.5116235), on bark of *Betula* sp., 1030 m, 12 June 2024, *Ph. Clerc* (G). – Species confirmed for Piemonte.

According to Nimis (2024), *H. sinuosa* is a widespread, but rare mild-temperate species found on bark and epiphytic mosses in open, humid and cold forests. It is declining throughout Italy and presently almost extinct. *Hypotrachyna sinuosa* is easily distinguished in the field from the other Italian *Hypotrachyna* species by its small size, the farinose soralia covering apices of ± ascending lobes and its yellow-green thallus (usnic acid). It was found in an alluvial alder grove near the Swiss border. A few other thalli could be observed in a small area, all on *Alnus incana* (L.) Moench. The most recent records of this species in Piemonte date back to the late 1800s (Baglietto and Carestia 1865, 1880).

Ph. Clerc, J. Nascimbene, Ph. Blaise

Maronea constans (Nyl.) Hepp (Fuscideaceae)

+ **PIE**: Val Vigezzo, Craveggia (Verbano-Cusio-Ossola) (UTM WGS84: 32T 464335.5116267), on bark of *Alnus incana* (L.) Moench, 1075 m, 16 April 2024, *Ph. Blaise* (G). – Species new to Piemonte.

Maronea constans is a rare mild-temperate lichen found on smooth bark, which was probably more frequent in the past (Nimis 2024). According to Scheidegger et al. (2002) it is near extinction in most Alpine countries, and it is included in the Italian

Red List of epiphytic lichens as Critically Endangered (Nascimbene et al. 2013). However, its superficial resemblance to *Rinodina* may contribute to its not being collected and recognized. The present sample was found in an alluvial alder grove near the Swiss border. Interestingly, numerous thalli could be observed (several dozens) in a small area, all on *Alnus incana* (L.) Moench.

Ph. Blaise, J. Nascimbene

***Parvoplaca tiroliensis* (Zahlbr.) Arup, Søchting & Frödén (Teloschistaceae)**

+ **VDA**: Western Alps, Alpi Graie, M. Bianco (Mont Blanc) group, Val Veny W of Courmayeur, ridge W above the Rifugio Elisabetta Soldini, (Aosta) (UTM WGS84: 32T 331630.5070248), cliffs and boulders of Jurassic limestone and alpine vegetation on N–NE exposed slope, on plant remnants, 2250 m, 30 July 2001, *J. Hafellner*, *P. L. Nimis*, *M. Tretiach* (GZU - JH87224). – Species new to Val d'Aosta.
+ **LIG**: Western Alps, Alpi Liguri, ridge S above the village Monesi, W above the Colle del Garezzo (Imperia) (UTM WGS84: 32T 401686.4877849), small outcrops of calcareous schist in subalpine pasture, on plant remnants and bryophytes, 1850 m, 21 July 2000, *J. Hafellner*, *P.L. Nimis*, *M. Tretiach* (GZU - JH87264). – Species new to Liguria.

The species has a wide, circumpolar arctic-alpine distribution in the northern hemisphere. In the Alps, it appears to be fairly common over calcareous substrates from the tree line to the nival belt (Nimis et al. 2018). In Italy it has so far been recorded only from the northern and central parts of the country (Nimis and Martellos 2024).

J. Hafellner, P. L. Nimis, M. Tretiach

***Polyozosia reuteri* (Schaer.) S.Y.Kondr., Lőkös & Farkas (Lecanoraceae)**

+ **PIE**: Western Alps, Alpi Liguri, just E below Úpega, the left bank of the creek (Negrone = Corvo torrent) (Cuneo) (UTM WGS84: 32T 398664.4886844), riparian woodland, on subvertical faces of large calcareous boulders, 1280 m, 19 July 2000, *J. Hafellner , P. L. Nimis, M. Tretiach* (GZU - JH87513). – Species new to Piemonte.

This Palearctic, montane to alpine species is widely distributed in central and southern Europe including the Alps (Nimis et al. 2018). In Italy, it is known from the Alps to Calabria (Nimis and Martellos 2024) but is not common due to the narrow ecological niche, *viz.* subvertical to overhanging faces of limestone cliffs.

J. Hafellner, P. L. Nimis, M. Tretiach

***Schismatomma umbrinum* (Coppins & P.James) P.M.Jørg. & Tønsberg (Roccellaceae)**

+ **ITA** (**CAL**): along road at border of national park 4.5 km S of village of Gambarie, near a bridge, Santo Stefano in Aspromonte (Reggio Calabria) (UTM WGS84: 33S 573190.4219551), on siliceous overhang, 1400 m, March 2023, leg. *J. Malíček, I. Frolov, J. Vondrák*, det. *J. Malíček* (PRA). – Species new to Italy (Calabria).

This species is primarily found in western parts of Europe, growing on acidic rocks beneath overhangs where it remains consistently shaded from direct sunlight. It often occurs in old, established woodlands and it has been recorded in various locations, including the Eastern Alps (Nimis et al. 2018), but its almost constant sterility suggests that it may be underreported or overlooked in other areas.

J. Malíček, S. Ravera

***Solenopsora liparina* (Nyl.) Zahlbr. (Leprocaulaceae)**

+ **EMR**: Boschi di Bardone, Monte Prinzera Nature Reserve, Terenzo (Parma) (UTM WGS84: 32T 586002.4943894), ophiolitic mountain ridge, in rock fissures, 725 m, 21 September 2024, *Z. Fačkovcová, L. Paoli* (SAV0018514); ibidem (UTM WGS84: 32T 585743.4943499), 636 m (SAV0018515). – Species new to Emilia-Romagna.

Solenopsora liparina is a saxicolous species characterized by a crustose-placodioid thallus of olivaceous grey or grey-green colour, which can form up to 2.5-cm wide rosettes or arcs of lobes. Lobes are flat to slightly convex, 0.3–0.6 mm wide, with white pruina at the margin. It grows on ultramafic rocks with a very low silica content, such as serpentinite (Guttová and Nimis 2021). So far, scattered localities are known from the Balkan peninsulas, Turkey, Czech Republic, France, and British Isles (Guttová et al. 2019). In Italy, it was recorded only from few sites in Liguria, Lombardia, and the Apennines in Toscana (Nimis and Martellos 2024). At the locality of Monte Prinzera, it predominantly grows on west and southwest-facing rocks and in rock fissures.

L. Paoli, Z. Fačkovcová

***Trapelia glebulosa* (Sm.) J.R.Laundon (Trapeliaceae)**

+ **VDA**: Piccolo San Bernardo pass (Aosta) (UTM WGS84: 32T 336331.5062336), on pebbles and on soil among rocks, in alpine pastures, 2065 m, 23 August 2024, *S. Ongaro, D. Isocrono* (ORO n. 334). – Species new to Val d'Aosta.

Trapelia glebulosa is distinguished by its small scattered squamules bearing apothecia at a very early stage. This species usually grows near the ground, mainly in upland areas such as the one in Val d'Aosta. Although *T. glebulosa* is common throughout the Alps (Nimis et al. 2018), it had not yet been reported for Val d'Aosta, a region that has been extensively studied. Since the species is often infertile, it may be overlooked or ignored or mistaken for small morphotypes of *T. coarctata* (Sm.) M. Choisy.

S. Ongaro, D. Isocrono

***Zwackhia viridis* (Ach.) Poetsch & Schied. (Lecanographaceae)**

+ **PIE**: Maritime Alps, Valle Vermenagna, Robilante, Orrido delle Barme (Cuneo) (UTM WGS84: 32T 380106.490502), on oak twigs in woodlands, 820 m, 25 May 2024, *D. Isocrono* (ORO n. 395). – Species new to Piemonte.

A crustose, photophobic lichen characterized by a thin thallus with numerous, regularly distributed lirellae. The absence of soralia distinguishes this species from the similar *Z. sorediifera* (P.James) Ertz. In Italy, it has been reported more frequently in the Tyrrhenian than in the Adriatic side of the peninsula (Nimis 2024). This species is widespread throughout the Alps, although it is not very common (Nimis et al. 2018).

D. Isocrono

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